#### NL INDUSTRIES/TARACORP SUPERFUND SITE GROUP

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November 18, 2016

#### By Electronic Mail and First Class Mail

Ms. Sheri L. Bianchin Remedial Project Manager Institutional Controls Coordinator U.S. Environmental Protection Agency Region 5 77 West Jackson Boulevard (SR-6J) Chicago, IL 60604

Re: NL Industries/Taracorp Superfund Site; Granite City, Illinois Second 2016 Semi-Annual Operation and Maintenance Inspection (November 2016)

Dear Ms. Bianchin:

On behalf of the NL Industries/Taracorp Superfund Site Group (Group), enclosed are copies of the log sheets, notes, and reproductions of photographs documenting the results from the second 2016 semi-annual operation and maintenance inspection performed on November 15, 2016 at the NL Industries/Taracorp Superfund Site in Granite City, Illinois. The results of the inspection are summarized on the log sheets which are attached.

Several items of note from the inspection are listed as follows:

- As you know, significant changes have been previously documented in the areas at and around Slough Road as part of Beelman Trucking Company's (Beelman) efforts to redevelop and use the properties. Prior to the inspection, I met with Mr. Earl Boyd, Terminal Manager for Beelman River Terminals, Inc., who confirmed that there has been no disturbance to the paved surface of Slough Road (which is no longer visible) since the time the paved roadway was covered with soil fill. During the inspection, scattered hard rubber battery case chips were observed, as previously documented, in several small areas (e.g., several square feet) near the foundation of the former Robin's Nest lounge and adjacent debris (concrete) piles. Photographs of the Slough Road area are provided in Attachment 1.
- Also regarding Slough Road, and as shown in Attachment 1 (photographs 1, 2, and 13-16), Beelman has recently installed perimeter security fence around its warehouse building. The perimeter security fence extends along Bremen Street on the south end of the Slough Road area. The fence and locked gate along Bremen Street restrict access to Slough Road; access to Slough Road is no longer possible without passing through the Beelman office and security area along Route 3.
- The paved portion of Watson Alley in Eagle Park Acres (as shown on Figure 1 and the photographs in Attachment 2) was inspected and noted to be in good condition.

Mr. Sheri Bianchin November 18, 2016 Page 2

- Three remote fill properties (200 Harrison Street, 206 Terry Street, and 200 Allen Street) in Eagle Park Acres that were previously remediated by EPA (and where lead-impacted soil and/or battery case chips may remain in place at a depth of three feet below the ground surface) were observed during the inspection. As shown on the photographs in Attachment 3, the properties are vacant and no evidence of subsurface soil disturbance was observed.
- Alleys in Venice that were paved during remedial activities were inspected and noted to be in generally good condition, with some minor cracking and deterioration observed in some areas, with no battery case chips visible. The Venice alleys are shown on Figure 2 and are identified on the photographs in Attachment 4. Recent asphalt patching at the end of the alley along 6<sup>th</sup> Street (Attachment 4, photograph 9) confirms that the local municipality is continuing to repair and repave alleys, as necessary.
- Observations related to the Taracorp pile cap and main industrial site are shown on the photographs provided in Attachment 5. As shown on the photographs, All Pallet Service, Inc. (the operator of the pallet recycling company on the 1459-1500 State Street properties (e.g., the State Street Warehouse properties) has repaired the security fence (Attachment 5, photographs 22-29) to address the damage observed during the first 2016 semi-annual operation and maintenance inspection. As you know, the Group's contractor, Environmental Works, Inc., is currently utilizing the eastern portion of the 1555 State Street property (Attachment 5, photographs 70-78) for clean soil backfill and sod handling activities associate with residential soil remediation.
- The former Rich Oil building has recently been demolished and removed from the 1501 State Street property (Attachment 5, photograph 58).
- Remote fill properties (Schaeffer Road and Sand Road) previously remediated by EPA (and where lead-impacted soil and/or battery case chips may remain in place at a depth below three feet) were observed during the inspection. Photographs of Schaeffer Road and Sand Road are provided in Attachment 6 and Attachment 7, respectively. There was no evidence of disturbance at Schaeffer Road. At Sand Road, the scattered hard rubber battery case chips and some other debris (bricks, etc.) are evident near the foundation of the former building on the property.

Please let me know if you have questions or if additional information or clarification is needed at this time.

Very truly yours,

LEED ENVIRONMENTAL, INC.

Project Coordinator

attachments

cc: Ms. Erin Rednour/Mr. Tom Miller – Illinois Environmental Protection Agency (w/attachments, by electronic mail)

Technical Committee, NL Industries/Taracorp Superfund Site Group (w/attachments, by electronic mail)

### **NL Industries/Taracorp Superfund Site Inspection Log - Operation and Maintenance**

Site Structure	Inspected (yes/no)	Inspection Observations	Maintenance Work Performed or Required
Security Fence:			
Gates/locks secure and operative	Yes	Gate near 16th and State Streets was locked at the time of the inspection. The gate and lock were secure and operative.	
Evidence of rust, cuts, deterioration	Yes	No significant rust, cuts, or deterioration.	Mr. Justin Shrum, the owner/operator of All Pallet Service on the neighboring property, repaired the damaged fence that was observed during the June 2016 semi-annual operation and maintenance inspection.
Evidence of unauthorized entry	Yes	No evidence of unauthorized entry.	
Burrowing or tunneling under fence	Yes	No evidence of burrowing or tunneling under fence.	
Damaged barbed wire	Yes	No evidence of damaged barbed wire.	
Comments			
Warning Signs:			
Warning signs (on fence around 1555 State Street property and Taracorp pile property)	Yes	In October 2014, the Group's contractor, TNT Fence Company, installed five warning signs on the perimeter security fence: (1) one sign along State Street adjacent to the locked gate near State Street and 16th Street; (2) two other signs along State Street; (3) one sign along the railroad tracks near the intersection of 16th Street and Edison Avenue; and (4) one sign near the Metalico/Mayco property. No problems with the signs were identified during the November 2016 inspection.	
Evidence of rust, cuts, deterioration, or other damage	Yes	No evidence of rust, cuts, deterioration, or other damage.	
Evidence of tampering	Yes	No evidence of tampering.	
Comments		r g	
Access Road:			
Evidence of settlement or deterioration	Yes	No evidence of settlement, deterioration, or other problems to access roads at main industrial site. The Group's remedial action contractor, Environmental Works, Inc. (EWI), is currently using the eastern portion of the 1555 State Street property for staging of soil backfill and sod associated with residential soil remediation.	
Comments			
Landfill Cover - Vegetation:			
Establishment of grass from initial seeding	Yes	Grass/vegetation is well established over the entire Taracorp pile cap and main industrial site.	The Group's contractor, Munie Greencare Professionals, cut the vegetation at the 1555 State Street property, excluding the Taracorp pile cap, on October 20, 2016. No further grass cutting is expected this year.
Adequate growth of vegetation	Yes	Vegetation is abundant and thick across the entire site.	
Evidence of stress	Yes	No evidence of stress.	
Presence of trees/shrubs	Yes	No small bushes/trees were observed on the Taracorp pile cap.	
Need for mowing/maintenance	Yes	No current need for maintenance on the Taracorp pile cap.	
Comments			1

### NL Industries/Taracorp Superfund Site Inspection Log - Operation and Maintenance

Inspector's Name/Company: Jeff Leed, Leed Environmental, Inc.

Inspection Date: 11/15/2016

Site Structure	Inspected	Inspection Observations	Maintenance Work
	(yes/no)		Performed or Required
Landfill Cover – Erosion			
Evidence of erosion	Yes	No erosion evident.	
Indicate areal extent and location			
Comments			
Landfill Cover – Settlement			
Evidence of settlement	Yes	No settlement evident.	
Indicate areal extent and location			
Comments			
Landfill Cover – Cracks			
Evidence of cracks	Yes	No cracks evident.	
Indicate areal extent and location			
Comments			
Landfill Cover – Bulges			
Evidence of bulges	Yes	No bulges evident.	
Indicate areal extent and location			
Comments			
Landfill Cover – Ponding			
Evidence of ponding	Yes	No ponding evident.	
Indicate areal extent and location			
Comments			
Landfill Cover – Seeps			
Evidence of seepage (leachate)	Yes	No seepage evident.	
Indicate areal extent and location			
Comments			
Landfill Cover – Slope Stability			
Evidence of sliding	Yes	No sliding evident.	
Indicate areal extent and location			
Comments			

### NL Industries/Taracorp Superfund Site Inspection Log - Operation and Maintenance

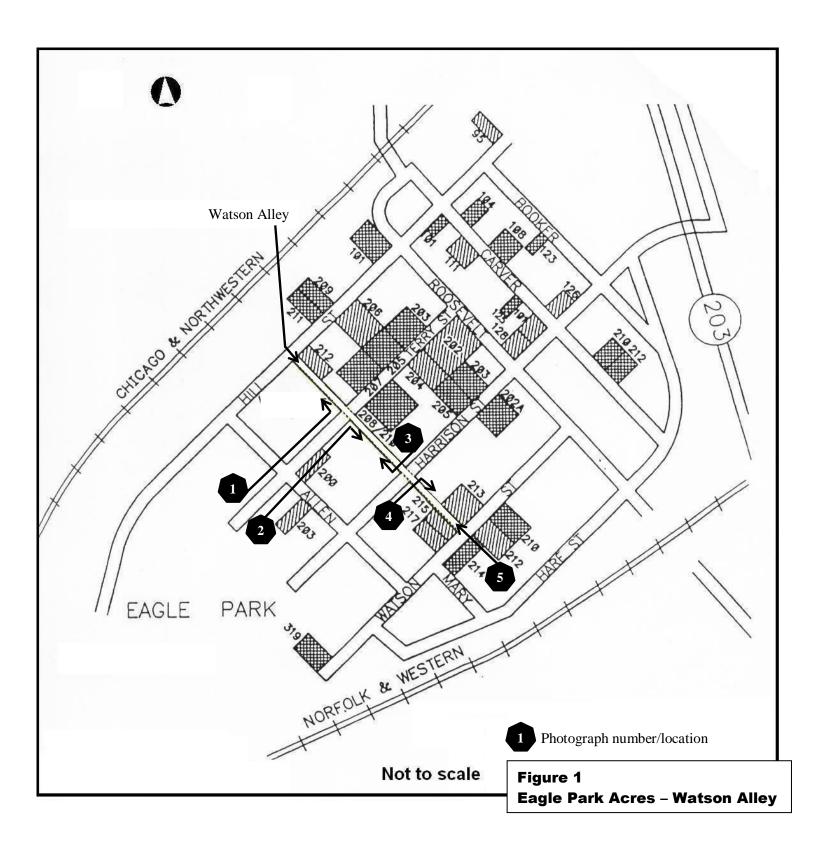
Inspector's Name/Company: Jeff Leed, Leed Environmental, Inc.

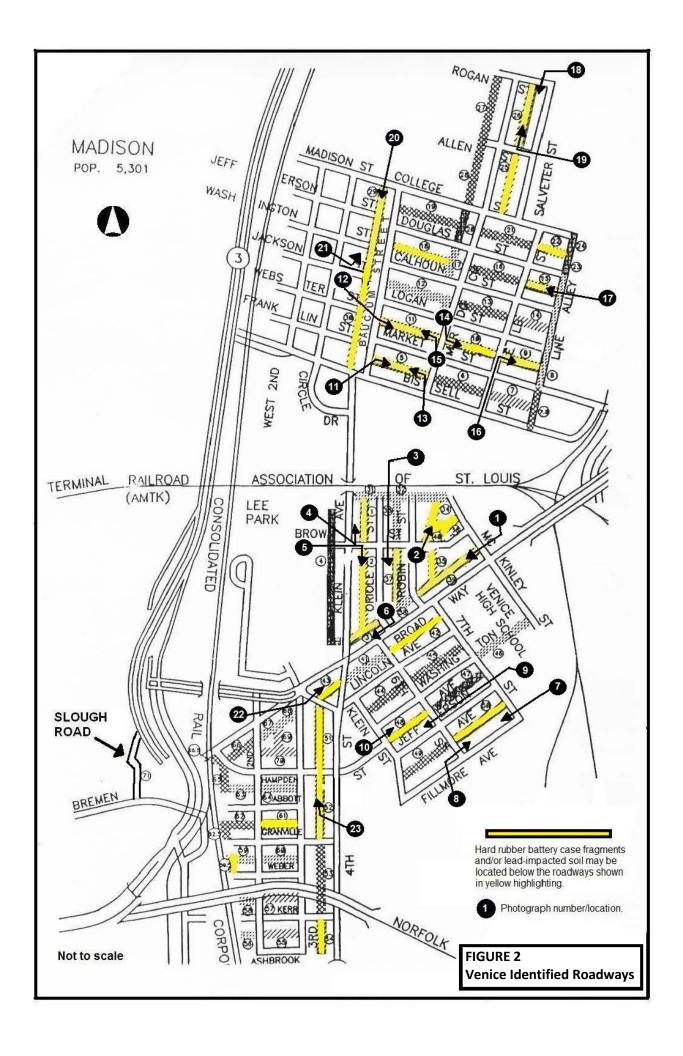
Site Structure	Inspected (yes/no)	Inspection Observations	Maintenance Work Performed or Required		
Leachate Management System					
Riser pipe and locks	Yes	Riser pipe clean and in good condition. The lid on the riser pipe was locked.			
Leachate levels in sump	No	EWI removed leachate from the sump in June 2014 as part of the five-year review groundwater monitoring event.			
Necessary sampling activities	No				
Necessary leachate disposal	No				
Comments					
Concrete Drainage Channel	<u> </u>				
Evidence of cracks or obstructions	Yes	No significant cracks or obstructions.			
Areas of erosion	Yes	No erosion observed.			
Comments					
Asphalt Covers - Integrity					
Evidence of broken asphalt or fissures	Yes	Some minor asphalt cracking and deterioration was observed in small areas along the sides of several paved alleys in Venice. Evidence of recent paving / patching of the alleys by Venice Township was observed along 6th Street (Attachment 4, photograph 9).			
Indicate areal extent and location					
Comments					

#### Other Notes/Observations:

- 1. As shown on the photographs in Attachment 1 and as previously reported, significant changes have previously been documented in the areas at and around Slough Road as part of Beelman Trucking Company's (Beelman) efforts to redevelop and use the properties. During the inspection, Mr. Earl Boyd, Terminal Manager for Beelman River Terminals, Inc., confirmed that there has been no disturbance to the paved surface of Slough Road (which is no longer visible) since the time it was covered with soil fill. During the inspection, some scattered hard rubber battery case chips were observed, as previously documented, in several small areas near the foundation of the former Robin's Nest lounge and adjacent debris (concrete) piles. Beelman Trucking has now installed a fence to restrict access.
- 2. Watson Alley in Eagle Park Acres (as shown on Figure 1 and the photographs in Attachment 2) was inspected and noted to be in good condition.
- 3. Three remote fill properties (200 Harrison Street, 206 Terry Street, and 200 Allen Street) in Eagle Park Acres that were previously remediated by EPA (and where lead-impacted soil and/or battery case chips may remain in place at a depth of 3 feet below ground surface) were observed during the inspection. As shown on the photographs in Attachment 3, the properties are vacant and no evidence of disturbance was observed.
- 4. Alleys in Venice that were paved during remedial activities were inspected and noted to be in generally good condition with some minor cracking and deterioration observed in some areas. The Venice alleys are shown on Figure 2 and are identified on the photographs in Attachment 4. Repairs were recently made to one of the alleys along 6th Street (Attachment 4, photograph 9).
- 5. Photographs showing the Taracorp pile cap and main industrial site are provided in Attachment 5. Vegetation is thick and abundant on the Taracorp pile cap. Observations related to the Taracorp pile cap and main industrial site (as shown on the photographs provided in Attachment 5) are summarized above.
- 6. Remote fill properties (Schaeffer Road and Sand Road) previously remediated by EPA (and where lead-impacted soil and/or battery case chips may remain in place at a depth of three feet below ground surface) were observed during the inspection. Photographs are provided in Attachment 6 and Attachment 7, respectively. There was no evidence of disturbance at Schaeffer Road. At Sand Road, most of the scattered hard rubber battery case chips and some other debris (bricks, etc.) are evident near the foundation of the former building.

Inspection Date: 11/15/2016





#### Attachment 1 Slough Road Photographs November 15, 2016



Photograph 1: Slough Road, inside of fence along Bremen Street.



Photograph 2: Slough Road, inside of gate/fence along Bremen Street.



Photograph 3: Slough Road, roadway.



Photograph 4: Slough Road, concrete debris pile.



Photograph 5: Slough Road, concrete debris, foundation of former Robin's Nest Lounge.



Photograph 6: Slough Road, roadway.

#### Attachment 1 Slough Road Photographs November 15, 2016



Photograph 7: Slough Road, roadway, foundation.



Photograph 8: Slough Road, small area of battery case chips along building foundation.



Photograph 9: Slough Road, small area of battery case chips along building foundation.



Photograph 10: Slough Road, roadway, foundation.



Photograph 11: Slough Road, concrete debris, foundation of former Robin's Nest Lounge.



Photograph 12: Slough Road, building demolition debris on concrete foundation.

#### Attachment 1 Slough Road Photographs November 15, 2016



Photograph 13: Slough Road, inside of fence, gate along Bremen Street.



Photograph 14: Slough Road, outside of gate along Bremen Street.



Photograph 15: Slough Road, outside of gate along Bremen Street.



Photograph 16: Slough Road, fence along south side of property.

# Attachment 2 Eagle Park Acres – Watson Alley Photographs November 15, 2016



Photograph 1: Watson Alley, gravel area.



Photograph 2: Watson Alley, gravel area.



Photograph 3: Watson Alley, gravel area.



Photograph 4: Watson Alley, paved area (view from Harrison Street).



Photograph 5: Watson Alley, paved area (view from Watson Street).

# Attachment 3 Eagle Park Acres Remote Fill Properties Photographs November 15, 2016



Photograph 1: 200 Harrison, also known as 200 Roosevelt Street (view from Roosevelt Street).



Photograph 2: 200 Harrison Street, also known as 200 Roosevelt Street (view from Harrison Street).



Photograph 3: 200 Allen Street (view from Allen Street).



Photograph 4: 200 Allen Street (view from Terry Street).



Photograph 5: 200 Allen Street (view from corner of Allen and Terry Streets).



Photograph 6: 206 Terry Street (view from Terry Street).



Photograph 1: Alley at McKinley Street near Broadway.



Photograph 2: Alley at McKinley Street and Brown Street (view north).



Photograph 3: Alley between Robin Street and Oriole Street (view south).



Photograph 4: Alley between Oriole Street and Klein Avenue (view north).



Photograph 5: Alley (gravel) between Oriole Street and Klein Avenue (view south).



Photograph 6: Alley between Broadway and Oriole Street (view southwest).



Photograph 7: Alley between Fillmore Avenue and Jefferson Street.



Photograph 8: Alley between Jefferson Street and Fillmore Street (view northeast from 6<sup>th</sup> Street).



Photograph 9: Alley between Jefferson Street and Washington Street (view southwest from 6<sup>th</sup> Street).



Photograph 10: Alley between Jefferson Street and Washington Street (view northeast from Klein Street).



Photograph 11: Alley between Bissell Street and Market Street (view east from Baucum Street).



Photograph 12: Alley between Market Street and Logan Street (view east from Baucum Street).



Photograph 13: Alley between Bissell Street and Market Street (view west from Meredocia Street).



Photograph 14: Alley between Market Street and Logan Street (view east from Meredocia Street).



Photograph 15: Alley between Market Street and Logan Street (view west from Meredocia Street).



Photograph 16: Alley between Market Street and Logan Street (view east from Selb Street).



Photograph 17: Alley between Calhoun Street and Douglas Street (view west from Line Alley); several holes have been filled with asphalt since June 2012 inspection.



Photograph 18: Alley between Salveter Street and Meredocia Street (view south from Rogan Street).



Photograph 19: alley between Allen Street and Rogan Street (view north from Allen Street).



Photograph 20: Alley between Baucum Street and West 3<sup>rd</sup> Street (view south from Madison Street and College Street).



Photograph 21: Alley on Jackson Street (between 3<sup>rd</sup> Street and Baucum Street).



Photograph 22: Alley between 4<sup>th</sup> Street, Broadway, and Lincoln Avenue.



Photograph 23: Alley (gravel) between 3<sup>rd</sup> Street and 4<sup>th</sup> Street (view north from Abbott).



Photograph 1: Entrance to 1555 State Street property along State Street.



Photograph 2: Warning sign at front gate along State Street.



Photograph 3: Concrete drainage swale, south side of Taracorp pile (view north).



Photograph 4: End of concrete drainage swale, south side of Taracorp pile.



Photograph 5: Concrete drainage swale, south side of Taracorp pile (view north).



Photograph 6: Concrete drainage swale, east side of Taracorp pile (view north).



Photograph 7: Concrete drainage swale, east side of Taracorp pile (view southeast).



Photograph 8: Concrete drainage swale, fence, and vegetation; northeastern side of Taracorp pile along 16<sup>th</sup> Street (view northwest).



Photograph 9: Concrete drainage swale, fence, and vegetation; northeastern side of Taracorp pile along 16<sup>th</sup> Street (view northwest).



Photograph 10: Concrete drainage swale and vegetation, northwestern side of Taracorp pile (view southwest).



Photograph 11: Concrete drainage swale and vegetation, northwestern side of Taracorp pile (view northeast).



Photograph 12: Vegetation, northwestern side of Taracorp pile cap (view southwest).



Photograph 13: Concrete drainage swale, fence, and vegetation along northwestern side of Taracorp pile (view southwest).



Photograph 14: Concrete drainage swale, fence, and vegetation along northwestern side of Taracorp pile (view southwest).



Photograph 15: Concrete drainage swale, vegetation along northwestern side of Taracorp pile (view north/northeast).



Photograph 16: Fence, warning sign, and gate northwestern side of Taracorp pile (view southwest).



Photograph 17: Vegetation near base of west side of Taracorp pile (view northeast).
NL Industries/Taracorp Superfund Site Operation and Maintenance



Photograph 18: Fence, gate, and warning sign along northwestern side of Taracorp pile (view northwest).



Photograph 19: Vegetation near base of western side of Taracorp pile (view north).



Photograph 20: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view south).



Photograph 21: Vegetation along western side of Taracorp pile (view north).



Photograph 22: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view south).



Photograph 23: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view north).



Photograph 24: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view south).



Photograph 25: Fence and concrete drainage swale (southwestern side of Taracorp pile cap).



Photograph 26: vegetation near base of southwestern side of Taracorp pile (view northwest).



Photograph 27: Fence and concrete drainage swale (southwestern side of Taracorp pile cap).



Photograph 28: Fence and concrete drainage swale (southwestern side of Taracorp pile cap).



Photograph 29: Fence (material staging on State Street Warehouse property).



Photograph 30: Concrete drainage swale (southeastern side of Taracorp pile cap).



Photograph 31: Vegetation and concrete drainage swale along southwestern slope of Taracorp cap pile (view west).



Photograph 32: Concrete drainage swale along southern slope of Taracorp pile.



Photograph 33: Concrete drainage swale along southern slope of Taracorp pile.



Photograph 34: Concrete drainage swale along southern slope of Taracorp pile.



Photograph 35: Vegetation along southeast side of Taracorp pile cap (view northeast).



Photograph 36: Southern side of Taracorp pile (view west).



Photograph 37: Storm water outlet.



Photograph 38: Storm water outlet.



Photograph 39: Storm water manhole near fence.



Photograph 40: Vegetation and fence near former Rich Oil facility (view toward State Street).



Photograph 41: Vegetation, southern side of Taracorp pile cap.



Photograph 42: Vegetation, eastern side of Taracorp pile cap.



Photograph 43: Leachate riser pipe.



Photograph 44: Locked lid on leachate riser pipe (locked lid installed fall 2007).



Photograph 45: Area of former BV&G Truck Service build- Photograph 46: Vegetation near fence along railroad ings (view east from northeastern side of Taracorp pile cap). tracks.





Photograph 47: Older and newer fence near former BV&G Truck Service buildings along railroad tracks (view northeast).



Photograph 48: Older and newer fence near former BV&G Truck Service buildings along railroad tracks (view northwest).



Photograph 49: Inside fence, corner of State Street and 16<sup>th</sup> Street).



Photograph 50: Concrete entranceway gate near 16<sup>th</sup> and State Streets.



Photograph 51: Fence, grass, and sidewalk along State Street.



Photograph 52: Fence, grass, and sidewalk along State Street.



Photograph 53: Fence, grass, and sidewalk along State Street.



Photograph 54: Warning sign along State Street.





Photographs 55 and 56: Southern end of concrete sidewalk on 1555 State Street property (adjacent to former Rich Oil property).



Photograph 57: Southern end of concrete sidewalk on 1555 State Street property (adjacent to former Rich Oil property).



Photograph 58: Former Rich Oil property.



Photograph 59: Fence, grass, sidewalk along State Street.



Photograph 60: Fence, grass, sidewalk along State Street.



Photograph 61: Fence, grass, sidewalk along State Street.



Photograph 62: End of sidewalk along railroad tracks.



Photograph 63: End of sidewalk along railroad tracks.



Photograph 64: End of sidewalk along railroad tracks.



Photograph 65: Gas utilities along railroad tracks.



Photograph 66: Warning sign on fence along railroad tracks near 16<sup>th</sup> Street and Edison Avenue.



Photograph 67: Warning sign on fence along railroad tracks near 16<sup>th</sup> Street and Edison Avenue.



Photograph 68: Fence and vegetation along railroad tracks and 16<sup>th</sup> Street.



Photograph 69: Monitoring well, fence, and vegetation along railroad tracks and 16<sup>th</sup> Street.



Photograph 70: Administrative/support trailer.



Photograph 71: Administrative/support trailer.



Photograph 72: Sod rolls.



Photograph 73: Loading backfill soil for residential property remediation.



Photograph 74: Loading backfill soil for residential property remediation.



Photograph 75: Loading backfill soil for residential property restoration.



Photograph 76: Sod.



Photograph 77: Sod handling.



Photograph 78: Sod loaded for transport to residential property.

#### Attachment 6 Schaeffer Road Photographs November 15, 2016



Photograph 1: Schaeffer Road property.



Photograph 2: Schaeffer Road property.



Photograph 3: Schaeffer Road property.



Photograph 4: Schaeffer Road property, 5-gallon container.



Photograph 5: Schaeffer Road property.



Photograph 6: Schaeffer Road property.

### Attachment 6 Schaeffer Road Photographs November 15, 2016



Photograph 7: Schaeffer Road property.



Photograph 8: Schaeffer Road property.



Photograph 9: Schaeffer Road property.



Photograph 10: Schaeffer Road property.

#### Attachment 7 Sand Road Photographs November 15, 2016



Photograph 1: Sand Road property, gate.



Photograph 2: Sand Road property, entrance road.



Photograph 3: Sand Road property.



Photograph 4: Sand Road property.



Photograph 5: Sand Road property, gate.



Photograph 6: Sand Road property.

#### Attachment 7 Sand Road Photographs November 15, 2016



Photograph 7: Sand Road property.



Photograph 8: Sand Road property, concrete foundation.



Photograph 9: Sand Road property, concrete foundation.



Photograph 10: Battery case chips on soil surface near former concrete foundation.



Photograph 11: Battery case chips, bricks, and debris on soil surface near former concrete foundation.



Photograph 12: Sand Road property, former concrete foundation.